

REMARKS

Claims 1-4 are amended and claim 5 is canceled herein. Claims 6-14 are withdrawn from consideration. Support for the amendment to claims 1-4 can be found, for example, in the original claims. Hence no issues of new matter are presented. Upon entry of the Amendment, claims 1-4 and 6-14 will be all of the claims pending in the application.

I. Restriction Requirement

Applicants affirm the election to prosecute claims 1-5 and claims 6-14 are withdrawn from consideration in view thereof.

II. Claim Rejections Under 35 U.S.C. § 112, second paragraph

Claims 1-5 are rejected under 35 U.S.C. § 112, second paragraph as allegedly being indefinite due to the recitation of the word “based”, which is said to include elements not actually disclosed. The Examiner has interpreted the phrases employing the word “based”, e.g., aluminum-based, as meaning comprising, i.e., comprising aluminum, etc.

Claims 1-4 are amended herein, thereby obviating the rejection. Claim 5 is canceled herein and therefore the rejection as to claim 5 is moot.

Accordingly, Applicants respectfully request withdrawal of the rejection.

V. Claim Rejections Under 35 U.S.C. § 102

Claims 1-3 and 5 are rejected under 35 U.S.C. § 102 as allegedly being unpatentable over Sigai, US ‘124. The Examiner asserts that US ‘124 teaches mixing a manganese-doped zinc silicate phosphor with an aluminum oxide precursor and calcining to form an aluminum oxide coating based upon Example XXIII at col. 21.

Applicants respectfully traverse the rejection. Aluminum Oxide C is used in the noted Example but does not contain a 1,3-diketone structure as recited in claim 1 as amended. Thus, US

'124 does not teach all elements of the presently claimed invention and, therefore, does not anticipate the claimed invention.

Accordingly, Applicants respectfully request withdrawal of the rejection.

III. Claim Rejections Under 35 U.S.C. § 103

Claims 1-5 are rejected under 35 U.S.C. § 103 as allegedly unpatentable over Kasenga et al (US '707) in view of Mizuta et al (US '654).

US '707 is relied on for the teaching of a process of mixing a manganese-doped zinc sulfate phosphor with aluminum nitrate and calcining to form an aluminum oxide coating.

The Examiner recognizes that US '707 does not teach the use of an aluminum 1,3, diketone coupling agent but indicates that US '654 teaches the equivalence of nitrates to other precursors, including acetylacetonates as precursors to form metal oxide precursors. Therefore, it is the Examiner's position that it would have been obvious to one of ordinary skill in the art to use aluminum acetylacetone instead of aluminum nitrate with a reasonable expectation of success and with the expectation of similar results.

Applicants respectfully traverse the rejection and submit that the Examiner has not made a *prima facie* showing of obviousness. A *prima facie* showing of obviousness requires (1) a suggestion or motivation in the references or in the knowledge of one of ordinary skill in the art, to modify the references or to combine reference teachings; (2) a reasonable expectation of success; and (3) a teaching or suggestion of all claimed limitations. In this case there is no motivation to combine the references as suggested by the Examiner.

US '654 is directed to a superconductive material and is in a different technical field from US '707. Thus, one of ordinary skill in the art would not have been motivated to combine the references. Even if one were to combine the references, US '707 discloses several various

examples of metal compounds (col. 2, lines 18-31), but there is no teaching or suggestion that a nitrate is equivalent to a 1,3-diketone or that a 1,3-diketone should be selected instead of nitrate. Further, US '654 does not teach or suggest using a 1,3-diketone in place of nitrate. Thus, one of ordinary skill in the art would not have been motivated to combine the disclosures of the references with a reasonable expectation of success in achieving the claimed invention.

Accordingly, Applicants respectfully request withdrawal of the rejection.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

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